

1.0 GENERAL

1.1 Project Description

The proposed overall 120th Avenue Connection improvements involve the extension of 120th Avenue (SH 128) from Wadsworth Parkway (SH 121) east to U.S. 287, a distance of approximately 1.1 miles. It also includes extensions and/or improvements to several other local roads, including: Commerce Street, which will be extended from its current terminus at Park Street, approximately ½ mile to the south to 118th Avenue; Wadsworth Boulevard, which will be realigned approximately 500 feet to the west of its current location for a distance of approximately 1,500 feet, where it will tie back in with the existing street.; a new section 118th Avenue, which will be from existing Allison Street to realigned Wadsworth Boulevard, a distance of approximately 650 feet; and U.S. 287, where a new connection will be made from just north of 120th Avenue to Upham Street, a distance of approximately 1,300 feet. New bridge structures will be required on 120th Avenue over U.S. 36 and proposed Commerce Street, and there will be an undercrossing of the BNSF Railroad. The improvements are proposed to be constructed in three phases as follows:

Phase 1 includes the extension of SH 128 (120th Avenue) from Wadsworth Parkway to Wadsworth Boulevard (with structures over US 36 and Commerce Street), and realigning and relocating a portion of Wadsworth Boulevard.

Phase 2 will include the remaining extension of 120th Avenue, from Wadsworth Boulevard to U.S. 287, where it will tie back in with existing 120th Avenue. This includes the undercrossing of the BNSF Railroad. Also included in Phase 2 is the U.S. 287 connection to Upham Street.

Phase 3 is the remaining improvements to the local streets, including Commerce Street and 118th Avenue and is included in the Contract as Additional Requested Elements (ARE's).

This solicitation is only for the design and construction of Phases 1 and 3 of the overall Project.

Except as otherwise stated or required in the Contract Documents, CDOT Roadways (SH-121, SH-128, and US-36) shall be designed and constructed according to CDOT standards and requirements. Remaining roadways shall be designed and constructed according to City and County of Broomfield standards and requirements.

Other improvements in the general Project area which are not a part of this Project include:

- RTD Improvements: RTD is proposing to construct a new Park-n-ride facility south of the proposed 120th Avenue Connection bridge which includes a pedestrian bridge over U.S. 36 with bus slip ramps from U.S. 36 to serve this crossing. This project must be completed and functional before the 120th Avenue Connection Project can be completed (which requires the removal of the existing Park-n-ride at Wadsworth Parkway).
- Future U.S. 36 Improvements: Future ultimate widening of both Wadsworth Parkway and U.S. 36 (Boulder Turnpike), a new diamond interchange at U.S. 36 and 120th Avenue, and a revised interchange configuration at U.S. 36 and Wadsworth Parkway are being studied as a part of the U.S. 36 EIS. While the final preferred configuration is not known

at this time, conceptual geometry and grades is provided for the alternative that is to be used by the 120th Avenue Connection Project to set grades and structure clearances and plan future drainage impacts.

1.1.1 Project Location

The Project is located in the City and County of Broomfield, Colorado, in the south ½ of Sections 34 and 35, Township 1 South, Range 69 West and the north ½ of Sections 2 and 3, Township 2 South, Range 69 West

1.2 Basic Configuration

The Basic Configuration is defined as Work within the Right-of-Way that is required to conform to the configuration of 120th Avenue Connection and local street lane configurations and typical sections as shown in the preliminary design plans in the Reference Documents. The general geographic limits of the Basic Configuration are graphically shown on Exhibit A - Basic Configuration and Additional Requested Elements.

The Basic Configuration is further defined as follows:

1. Additional Requested Elements (AREs) and portions of AREs as shown on Exhibit A - Basic Configuration and Additional Requested Elements which are defined as Basic Configuration elements and are included in the Contractor's Proposal shall be incorporated into the Basic Configuration.
2. Prepare final design plans for roadway and drainage elements within limits of AREs 1 and 2 whether or not AREs are constructed as a part of Basic Configuration.
3. Construction of 120th Avenue Connection and Commerce Street shall accommodate existing US36 and future US36 mainline and interchange ramp configurations as shown in the preliminary design plans in the Reference Documents.
4. Structures:
 - A. Bridge superstructure for the 120th over US36 bridge is to be constructed to laneage requirements as shown in the preliminary design plans.
 - B. Bridge substructure for the 120th over US36 bridge is to be constructed to accommodate future US36 configuration for pier and abutment locations and limit of aesthetic treatments.
 - C. Vertical clearance from the bottom of the 120th bridge to existing or widened shoulder and future mainline shoulder and ramp shoulder of US36 shall not be less than 16.5 feet. Future mainline US36 and US36 ramp profiles beneath the bridge may be adjusted to provide the required clearance, provided that adjusted profiles do not introduce need for future retaining walls or guardrail between mainline and ramps.
 - D. Bridge superstructure for the 120th over Commerce Street bridge is to be constructed to laneage requirements as shown in the preliminary design drawings in the Reference Documents and to accommodate an additional lane on each side to accommodate acceleration and deceleration lanes approaching future US36 ramp intersections.

- E. West side abutment and retaining walls for the 120th over Commerce Street bridge are to be constructed to accommodate future US36 ramps and intersection.
- F. Construct bridge wingwalls to accept guardrail connections in future whether or not guardrail is warranted in initial condition.

5. Pavements and Laneage

- A. Construct concrete pavement with widths and laneages as shown in the Reference Drawings on SH-128 (120th Avenue Connection) from intersection with SH-121 (Wadsworth Parkway) to beyond intersection with Wadsworth Boulevard (Station 67+00).
- B. Construct concrete pavement as shown in the Reference Drawings to outer curb return for intersections of SH-128 (120th Avenue Connection) with Destination Drive and Wadsworth Boulevard.
- C. Construct composite HMA pavement sections with widths and laneages as shown in the drawings in the Reference Documents on Destination Drive, Wadsworth Boulevard (including intersection with 118th Avenue), Wadsworth Place, the frontage road connection from Transit Way, and 118th Avenue and Commerce Street if these AREs are constructed with Basic Configuration.
- D. Construct cul-de-sacs with composite HMA pavement sections as shown in the drawings in the Reference Documents at terminus of Allison Street north of 120th Avenue Connection and (if no AREs are constructed with Basic Configuration) at Allison Street south of 120th Avenue Connection at intersection of proposed 118th Avenue and Commerce Street.

6. Alignments

- A. Any geometric changes shall meet all Contract design criteria.
- B. Any geometric changes shall be compatible with the Phase 2 project and future US36 configuration.
- C. The horizontal alignment of 120th Avenue Connection, Wadsworth Blvd., 118th Avenue, Commerce Street, and US 36 shall not be changed.
- D. The vertical alignment of proposed 120th Avenue Connection, as shown in the drawings in the Reference Documents, may be raised a maximum of 1.0 (one) foot.
- E. Profile grade between 120th Avenue connection bridges over US36 and Commerce Street shall not be greater than 4.0%

7. Stormwater Quality and Systems

- A. Construct West detention pond (City Park Basin) in accordance with UD&FCD criteria and requirements for maintenance eligibility as a regional detention facility. Construct pond slopes, outlet features, and access to accommodate future US36 ramp without any reconstruction.
- B. Construct the Airport Creek Basin detention pond in accordance with UD&FCD criteria and requirements, as well as the storm sewer in Wadsworth Boulevard south to 116th Avenue and channel outfall east to the BNSF Railroad ROW.
- C. Design stormwater system in Commerce Street and 118th Avenue

8. Utilities:

- A. Perform grading and construct water and sanitary sewer relocations (complete with all manholes, valves, and hydrants) in Commerce Street alignment.

1.3 Additional Requested Elements

CDOT has identified the following AREs, in priority that it desires to have the Proposers include in the Project within the Guaranteed Maximum Price. The AREs are graphically shown on Exhibit A - Basic Configuration and Additional Requested Elements.

1.3.1 ARE Descriptions

1. All Work associated with 118th Avenue.
 - A. Basic Configuration elements shall include:
 - 1) Construct 118th Avenue between proposed Commerce Street and proposed Wadsworth Boulevard as shown in the drawings in the Reference Documents.
 - 2) Construct connection to Allison Street to south.
2. All Work associated with Commerce Street south of existing 120th Avenue:
 - A. Basic Configuration elements shall include:
 - 1) Construct Commerce Street between existing 120th Avenue, (including intersections with 120th Avenue) and proposed 118th Avenue, as shown in the drawings in the Reference Documents.
3. All Work associated with Commerce Street north of existing 120th Avenue.
 - A. Basic Configuration elements shall include:
 - 1) Construct Commerce Street from north tie to existing Commerce Street to existing 120th Avenue, (including intersection with Park Street and property accesses) as shown in the drawings in the Reference Documents.

1.4 Options

Additional Requested Elements, and portions of Additional Requested Elements, that the Proposer is unable to include in its Proposal within the Guaranteed Maximum Price shall become Options. The Proposer is required to include an Option Price for each Option with its Proposal on Form K. CDOT will not consider such Option Prices in its evaluation of the Proposals.

Prior to the dates indicated in Book 1, Exhibit I, CDOT shall have the right, but not the obligation, to accept any one or more of the Options at the Option Price included in the Proposal.

If the Proposer is able to include all Additional Requested Elements in its Proposal within the Guaranteed Maximum Price, Form K is not required to be submitted.

1.5 Exhibits

Exhibits are as follows:

Exhibit A - Basic Configuration and Additional Requested Elements